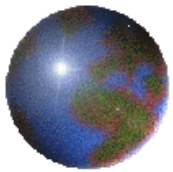
Policy Advisory Committee Presentation

August 12,1997

The “Snapshot”

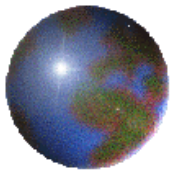


Snapshot

- Purpose
- Process
- Findings
- Tools Used

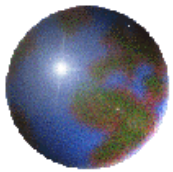
Purpose

- Display existing capabilities for assessing system performance
- Produce a very “rough” picture



Process

- Emulate federal report
- Plug in latest data (1995)
- Hurry, hurry, hurry



-- Snapshot --

Conditions and Performance for 1995

- Findings about roadways
- Findings about transit
- Findings about tools

-- Snapshot Findings--

ROADWAYS

Traffic & congestion

- VMT up 1.3% from 1994
- Congested peak-hour travel on interstates = 70%
- Congested urban freeways (% of total) = 36%, up from 30% in 1987

Pavement -- lane-miles needing immediate rehab doubled from 1992-95

Bridges -- 14% of bridges are deficient

Safety -- fatalities down but improvements now harder to obtain

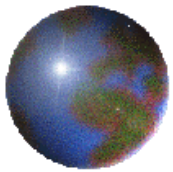
-- Snapshot Findings--

TRANSIT

Efficiency -- Buses operate more efficiently (Bay Area heavy rail exception) than other modes

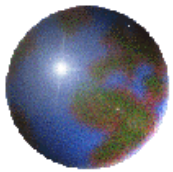
Service Effectiveness -- Rail modes more effective than buses

Cost Effectiveness -- 5-year farebox revenue drop continues, but up 0.5% over 1993/94



-- *Snapshot Findings--*

- Some reporting is possible
- Some data sets are detailed
- Data sets are not designed for performance analysis
- Not a view of the full system



-- Planning Tools --

- MONITORING (observation)
  - What Is There?
  - How Well Is It Working?
- MODELING (prediction)
  - Trends Projections
  - What If? questions

-- Monitoring Tools --

- Roadways
  - HPMS
  - TASAS
  - Traffic volumes & congestion
  - Pavement
  - Bridges
- Transit
  - Controller's office
  - US Department of Transportation

-- Monitoring Tools --

- Roadways
  - HPMS (Hwy Performance)
    - What - Roadway extent and use by functional class
    - Why---Federal mandate
    - How---Annual Reports to US DOT
    - Purpose--Justify decisions, projects
  - Example
    - “Number of lane-miles of arterials in Goldrush County in 1995”

-- Monitoring Tools --

ROADWAYS

- TASAS (traffic accident surveillance)
  - What---Roadway add-on to CHP accident statistics
  - Why---Federal mandate
  - How---Annual & special reports
  - Purpose---Justify decisions, projects
- Example:
- “Number of fatal car crashes in right lanes in Goldrush County in 1995”

-- Monitoring Tools --

ROADWAYS

- Traffic Volumes (Traffic Census)
  - What---Traffic counts
  - Why---Federal mandate
  - How---Annual reports
  - Purpose---Justify decisions, projects
- Example:

"Total traffic volume between Post Mile #6 and Post Mile #7 on State Highway number 'n' in 1995"

-- Monitoring Tools --

ROADWAYS

Congestion (Tachograph runs)

What---Traffic jam magnitude, severity, duration

Why---Highway operations need

How---Biennial & special reports

Purpose---Justify decisions, projects

Example:

"Vehicle-hours of daily delay on State Highways in Goldrush County in1995"

-- Monitoring Tools --

ROADWAYS

- Pavement monitoring
  - What---Survey of pavement condition
  - Why---Highway maintenance need
  - How---Biennial “State of the Pavement” report
  - Purpose---Justify decisions, projects
- Example:

“Number of structurally damaged lane-miles of State Highway “n” in 1995”

-- Monitoring Tools --

ROADWAYS

- Bridges
  - What---Survey of condition of bridges
  - Why---Federal mandate
  - How---Biennial bridge inspections
  - Purpose---Justify decisions, projects
- Example:
  - “Number of deficient bridges on State Highway ‘n’ in 1995”

-- Monitoring Tools --

TRANSIT

State Controller's Office

What---Financial data from recipients/distributees of Transportation Development Act of 1971

Why---PUC & Government Code mandate

How---Annual reports

Purpose---Ensure proper use of tax dollars

Example:

"Fares collected from motor buses operated by Transit Provider 'x' in 1995"

-- Monitoring Tools --

TRANSIT

- U. S. Dept. of Transportation
  - What---Financial data from grantees of federal transit funds in urban areas
  - Why---Federal mandate
  - How---Annual “Summaries and Trends” report
  - Purpose---Ensure proper use of tax dollars
- Example:
  - “Number of passenger trips per vehicle revenue mile in Urban Area ‘y’ in 1995”

-- Modeling Tools --

TRENDS PROJECTION

SYSTEM PLANNING

MVSTAF

WHAT IF? QUESTIONS

ITMS

-- Modeling Tools/Trends --

SYSTEM PLANNING

What---Response to trends defined by others (demographics, traffic, economics)

Why---State and federal mandates

How

- Corridor/route concepts lead to list of projects
- Benefit/cost analysis of proposed projects to choose projects that will be funded

Purpose---Justify decisions, projects

Example:

"List of roadway improvements approved for Goldrush County "

-- Modeling Tools/Trends --

MVSTAF

- What---Compilation of trends defined by others (vehicles, ridership, fuels)
- Why---Needed for planning, budgeting
- How---Annual report
- Purpose---Input to travel, air quality, energy models

Example:

- “Percent change in gasoline consumption in Goldrush County since…”

-- Modeling Tools/What if --

ITMS

What

– Planning decision support tool

– Performance measures

mobility, economic, financial, environmental, safety

Why---Federal mandate

How---Project planning software

Purpose---Justify decisions, projects

Example:

"Throughput of people in Corridor 'z' if new HOV lane and light rail line are built by 2012."

NEXT STEPS

- Regional performance measure assessments
- Baseline go/no go decisions

  When to start

  What content